

Title (en)

High eicosapentaenoic acid producing strains of *Yarrowia lipolytica*

Title (de)

Stämme von *Yarrowia lipolytica* zur Herstellung hochkonzentrierter Eicosapentaensäure

Title (fr)

Souches productrices à forte teneur en acide eicosapentaénoïque de *Yarrowia lipolytica*

Publication

**EP 2649887 B1 20160413 (EN)**

Application

**EP 13161757 A 20051103**

Priority

- US 62481204 P 20041104
- EP 05818267 A 20051103

Abstract (en)

[origin: US2006094092A1] Engineered strains of the oleaginous yeast *Yarrowia lipolytica* capable of producing greater than 10% arachidonic acid (ARA, an omega-6 polyunsaturated fatty acid) in the total oil fraction are described. These strains comprise various chimeric genes expressing heterologous desaturases, elongases and acyltransferases, and optionally comprise various native desaturase and acyltransferase knockouts to enable synthesis and high accumulation of ARA. Production host cells are claimed, as are methods for producing ARA within said host cells.

IPC 8 full level

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CPC (source: EP KR US)

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Designated contracting state (EPC)

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**US 26478405 A 20051101**; CA 2584719 A 20051103; CA 2585178 A 20051103; CA 2585235 A 20051103; CN 200580045779 A 20051103; CN 200580045823 A 20051103; CN 200580045910 A 20051103; CN 200580045917 A 20051103; DK 05818385 T 20051103; DK 05851406 T 20051103; DK 12152258 T 20051103; DK 13161757 T 20051103; EP 05818267 A 20051103; EP 05818385 A 20051103; EP 05851406 A 20051103; EP 12152258 A 20051103; EP 13161757 A 20051103; JP 2007540126 A 20051103; JP 2007540127 A 20051103; JP 2007540139 A 20051103; KR 20077012441 A 20070601; KR 20077012473 A 20070601; KR 20077012480 A 20070601; NO 20072516 A 20070516; NO 20072517 A 20070515; NO 20072575 A 20070521; US 2005040255 W 20051103; US 2005040256 W 20051103; US 2005040306 W 20051103; US 201213675144 A 20121113; US 201313943992 A 20130717; US 26473705 A 20051101; US 26576105 A 20051102; US 46607209 A 20090514; US 51250709 A 20090730; US 89346910 A 20100929